AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claims 1-9 (Canceled)

Claim 10 (Previously Presented): A monitoring device for monitoring at least one physiological parameter at an attachment site in a body, comprising:

a housing, having a tissue attachment surface, wherein the housing comprises a concavity and the tissue attachment surface is a surface within the concavity;

a securing structure for securing the monitoring device which allows the tissue attachment surface to be brought into contact with tissue at a preselected attachment site when in a retracted position, and is movable to an extended position in which it extends through tissue in contact with the attachment surface; and

at least one physiological parameter detector ~~carried by~~ at least one of on or within the housing.

Claim 11 (Canceled).

Claim 12 (Previously Presented): A monitoring device as in Claim 10, wherein the securing structure comprises a bioabsorbable material.

Claim 13 (Original): A monitoring device as in Claim 11, further comprising a lumen in communication with the concavity, for connection to a vacuum to draw tissue into the concavity.

Claim 14 (Original): A monitoring device as in Claim 10, wherein the physiological parameter detector comprises a pH detector.

Claim 15 (Original): A monitoring device as in Claim 10, further comprising an RF transmitter for transmitting data generated by the physiological parameter detector.

Claim 16 (Original): A monitoring device as in Claim 10, further comprising an electrical contact for contacting tissue in the body and transmitting data relating to the physiological parameter through the tissue.

Claims 17-54 (Canceled).

Claim 55 (Previously Presented): A monitoring device as in Claim 10, wherein the securing structure comprises a pin.

Claim 56 (Previously Presented): A monitoring device as in Claim 11, wherein the securing structure extends at least part way across the concavity when in the extended position.

Claim 57 (Previously Presented): A monitoring device as in Claim 11, wherein the securing structure includes a distal end, and the concavity includes a blind end to receive the distal end of the securing structure when the securing structure is in the extended position.

Claim 58 (Previously Presented): A monitoring device as in Claim 57, wherein the blind end includes a locking structure to retain the securing structure in the extended position.

Claim 59 (Previously Presented): A monitoring device as in Claim 11, further comprising a window that permits visualization of the interior of the concavity through the housing.

Claim 60 (Previously Presented): A monitoring device as in Claim 59, wherein the window comprises a transparent wall of the housing.

Claim 61 (Previously Presented): A monitoring device as in Claim 10, wherein the preselected attachment site is an esophagus.

Claim 62 (Previously Presented): A monitoring device as in Claim 10, wherein the housing includes a docking structure that permits removable attachment of the monitoring device to an introduction instrument that introduces the monitoring device to the preselected attachment site.

Claim 63 (Previously Presented): A monitoring device as in Claim 62, wherein the docking structure comprises at least one of a threaded aperture, a projection, a lumen, and a recess.

Claim 64 (Previously Presented): A monitoring device as in Claim 14, wherein the pH detector comprises one of an ion sensitive field effect transistor (ISFET) and an antimony electrode.

Claim 65 (Previously Presented): A monitoring device for monitoring at least one physiological parameter at an attachment site in a body, comprising:

a housing comprising a concavity such that a tissue attachment surface is on a surface within the concavity;

a securing structure for securing the monitoring device;

a lumen in communication with the concavity, for connection to a vacuum to draw tissue into the concavity to engage the securing structure; and

at least one physiological parameter detector ~~carried by~~ at least one of on or within the housing.

Claim 66 (Previously Presented): A monitoring device as in Claim 65, wherein the securing structure comprises a pin that allows the tissue attachment surface to be brought into contact with tissue when in a retracted position, and is movable to an extended position in which it extends through the tissue in contact with the attachment surface.

Claim 67 (Previously Presented): A monitoring device as in Claim 65, wherein the securing structure comprises a bioabsorbable material.

Claim 68 (Previously Presented): A monitoring device as in Claim 66, wherein the securing structure extends at least part way across the concavity when in the extended position.

Claim 69 (Previously Presented): A monitoring device as in Claim 66, wherein the securing structure includes a distal end, and the concavity includes a blind end to receive the distal end of the securing structure when the securing structure is in the extended position.

Claim 70 (Previously Presented): A monitoring device as in Claim 69, wherein the blind end includes a locking structure to retain the securing structure in the extended position.